

CLAIMS (amended)

1. (Amended) An information providing apparatus for providing a desired information screen by making selection from icons respectively assigned to information screens, comprising:

operation information input means inputted with operation information based on selection operation; and

switching means for switching a menu screen on which the icons are arranged, to an information screen of a selected one of the icons, with a predetermined transit screen inserted therebetween, in response to the operation information, characterized in that

the switching means gradually enlarges the selected icon on the transit screen, to zoom in on the icon, and gradually fades display of the selected icon on the transit screen to switch this display to display of the information screen.

2. (Deleted)

3. (Amended) An information providing apparatus for providing a desired information screen by making selection from icons respectively assigned to information screens, characterized in that

the icons are group icons respectively assigned to groups each grouping a plurality of information screens,

the information providing apparatus comprises operation information input means inputted with operation information based on selection operation, and switching

means for switching a menu screen in an upper layer on which the group icons are arranged, to a first menu screen in a layer lower than a selected group icon, with a predetermined first transit screen inserted therebetween, and

the switching means gradually enlarges the selected group icon on the first transit screen, to zoom in onto the group icon, and gradually fades display of the selected icon onto which the display is zooming in, on the transit screen, to switch the display to display of the first menu screen in the lower layer.

4. (Deleted)

5. (Amended) An apparatus according to claim 3, characterized in that the group icon in the lower layer has a second menu screen in a much lower layer, on which group icons are further arranged, and

the switching means switches the first menu screen in the lower layer on which the group icons are arranged, to the second menu screen in the lower layer of the selected group icon, with a predetermined second transit screen inserted therebetween, in response to the operation information, gradually enlarges the selected group icon on the transit screen to zoom in on the group icon, and gradually fades display of the group icon onto which the display is zooming in, on the second transit screen, to switch the display to display of the second menu screen in the lower layer.

6. (Deleted)

7. (Amended) An information providing apparatus for providing a desired information screen by making selection from icons respectively assigned to

information screens, comprising:

operation information input means inputted with operation information based on selection operation; and

switching means for switching the information screen to a menu screen on which the icons are arranged, with a predetermined transit screen inserted therebetween, in response to the operation information, characterized in that

the switching means gradually minifies enlarged display of an icon corresponding to the information screen, to zoom out onto the menu screen from display which has zoomed in on the icon, and gradually fades display of the information screen to switch the display of the information screen to display of a corresponding icon.

8. (Deleted)

9. (Amended) An information providing apparatus for providing a desired information screen by making selection from icons respectively assigned to information screens, characterized in that

the icons are group icons respectively assigned to groups each grouping a plurality of information screens,

the information providing apparatus comprises operation information input means inputted with operation information based on selection operation, and switching means for switching a menu screen in a lower layer on which the group icons are arranged, to a first menu screen in a layer upper than the selected group icon, with a

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predetermined first transit screen inserted therebetween, and

the switching means gradually minifies a group icon corresponding to a menu in the lower layer, to zoom out from the group icon, and gradually fades display of the menu screen in the lower layer, to switch the display of the menu screen in the lower layer to display of the group icon corresponding to the menu screen in the lower layer.

10. (Deleted)

11. (Amended) An apparatus according to claim 9, characterized in that the group icon in the upper layer has a second menu screen in a much upper layer, on which group icons are further arranged, and

the switching means switches the first menu screen in the upper layer, on which the group icons are arranged, to the second menu screen in the upper layer of a selected group icon, with a predetermined second transit screen inserted therebetween, in response to the operation information, gradually minifies the selected group icon on the transit screen to zoom out from the group icon, and gradually fades display of the first menu screen to switch the first menu screen to a corresponding second menu screen.

12. (Deleted)

13. An information providing apparatus for switching a focus icon on a menu screen displaying a plurality of icons, in response to operation of a selection operation key, and for displaying an information screen of an icon focused in response to operation of a predetermined operation key, characterized by comprising:

focus area generation means for generating a focus area at a predetermined area on the menu screen; and

menu screen movement means for moving the menu screen on which the plurality of icons are arranged, such that a desired icon of the plurality of icons is moved to and focused at the focus area, in response to operation of the selection operation key.

14. An apparatus according to claim 13, characterized by further comprising an enlarging display means for displaying the focused icon enlarged.

15. An information providing apparatus for providing a desired information screen by making selection from icons respectively assigned to information screens, characterized in that

the icons are a plurality of group icons respectively assigned to groups each grouping a plurality of information screens, and

the information providing apparatus comprises: operation information input means inputted with operation information based on selection operation; focus area generation means for generating a focus area at a predetermined area on a menu screen in an upper layer in which the group icons are arranged; menu screen movement means for moving the menu screen, on which the plurality of group icons are displayed, to the focus area such that a predetermined group icon among the plurality of group icons is moved to and focused at the focus area; and switching means for switching display to a menu screen in a lower layer, which belongs to the group icon moved to the focus

area.

16. An apparatus according to claim 15, characterized by further comprising enlarging display means for displaying the focused icon enlarged.

17. An information providing apparatus for switching a focus icon in response to operation of a selection operation key and for displaying an information screen of a focused icon in response to operation of a predetermined operation key, characterized by comprising

enlarging display means for displaying the focused icon enlarged, when the icon is focused.

18. An information providing apparatus for providing a desired information screen by making selection from icons respectively assigned to information screens, the icons being group icons assigned to groups each grouping a plurality of information screens, characterized by comprising:

focus switching means for switching a group icon indicating a focus, in response to operation of a selected operation key, on a menu screen in an upper layer on which the group icons are arranged;

enlarging display means for displaying a focused icon enlarged; and

layer switching means for switching display to a menu screen in a lower layer, on which the icons which belong to a group of the focused group icon, in response to operation of an operation key.

19. An information providing apparatus for providing a desired information

screen by making selection from icons respectively assigned to information screens, the icons being group icons respectively assigned to groups each grouping a plurality of information screens, characterized in that

the information providing apparatus comprises operation information input means inputted with operation information based on selection operation, and switching means for switching a menu screen in an upper layer, on which the group icons are arranged, to a menu screen in a lower layer, on which a predetermined number of icons that belong to a selected one of the group icons are arranged, with a predetermined transit screen inserted therebetween, and

the switching means displays an entire screen on which all icons that belong to the selected group icon are arranged, on the transit screen, and for thereafter zooming in on the menu screen in the lower layer.

20. An information providing apparatus for providing a desired information screen by making selection from icons respectively assigned to information screens, the icons being group icons respectively assigned to groups each grouping a plurality of information screens, characterized in that

the information providing apparatus comprises operation information input means inputted with operation information based on selection operation, and switching means for switching display between a menu screen on which a predetermined number of icons of information screens that belong to one same group are arranged, and the information screen, in response to the operation information, and

the switching means displays an entire screen on which all the icons that belong to a group of the information screen are arranged, in response to operation information based on predetermined operation in a state where the information screen is displayed.

21. An information providing apparatus for providing selectively a desired information screen by individual icons respectively assigned to information screens, the icons being group icons respectively assigned to groups each grouping a plurality of information screens, characterized in that

the information providing apparatus comprises: operation information input means inputted with operation information based on information operation; and switching means for switching display between a menu screen in an upper layer, on which a predetermined number of group icons are arranged, and a menu screen in a lower layer, on which icons that belong to the group of a selected group icon, are arranged, in response to the operation information, and

the switching means displays an entire screen on which all group icons that belong to the group icon are arranged, in response to predetermined operation in a state where the menu screen in the lower layer is displayed.

22. (Amended) An information providing method for providing a desired information screen by making selection from icons assigned to information screens, comprising:

an operation information input step of being inputted with operation information based on selection operation; and



a switching step of switching a menu screen on which the icons are arranged, to an information screen of an icon selected from the icons, with a predetermined transit screen inserted therebetween, in response to the operation information, characterized in that

in the switching step, the selected icon is gradually enlarged on the transit screen, to zoom in on the icon, and display of the selected icon on the transit screen is gradually faded to switch this display to display of the information screen.

23. (Deleted)

24. (Amended) An information providing method for providing a desired information screen by making selection from icons assigned to information screens, characterized in that

the icons are group icons respectively assigned to groups each grouping a plurality of information screens,

the information providing method comprises an operation information input step of being inputted with operation information based on selection operation, and a switching step of switching a menu screen in an upper layer on which the group icons are arranged, to a first menu screen in a lower layer of a selected group icon, with a predetermined first transit screen inserted therebetween, and

in the switching step, the selected group icon is gradually enlarged on the first transit screen, to zoom in onto the group icon, and display of the selected icon onto which the display is zooming in is gradually faded on the transit screen, to switch the

display to display of the first menu screen in the lower layer.

25. (Deleted)

26. (Amended) A method according to claim 24, characterized in that the group icon in the lower layer has a second menu screen in a much lower layer, on which icons are further arranged, and

in the switching step, the first menu screen in the lower layer on which the group icons are arranged, is switched to the second menu screen in the lower layer of the selected group icon, with a predetermined second transit screen inserted therebetween, in response to the operation information, and the selected group icon on the transit screen is gradually enlarged to zoom in on the group icon, and display of the group icon onto which the display is zooming in is gradually faded on the second transit screen, to switch the display to display of the second menu screen in the lower layer.

27. (Deleted)

28. (Amended) An information providing method for providing a desired information screen by making selection from icons assigned to information screens, comprising:

an operation information input step of being inputted with operation information based on selection operation; and

a switching step of switching the information screen to a menu screen on which the icons are arranged, with a predetermined transit screen inserted therebetween, in

response to the operation information, characterized in that

in the switching step, enlarged display of the icon corresponding to the information screen is gradually minified, to zoom out onto the menu screen from display which has zoomed in on the icon, and display of the information screen is gradually faded to switch the display of the information screen to display of the corresponding icon.

29. (Deleted)

30. (Amended) An information providing method for providing a desired information screen by making selection from icons respectively assigned to information screens, characterized in that

the icons are group icons respectively assigned to groups each grouping a plurality of information screens,

the information providing method comprises an operation information input step of being inputted with operation information based on selection operation, and a switching step of switching a menu screen in a lower layer on which the group icons are arranged, to a first menu screen in a layer upper than a selected group icon, with a predetermined first transit screen inserted therebetween, and

in the switching step, the group icon corresponding to a menu in the lower layer is gradually minified, to zoom out from the group icon, and display of the menu screen in the lower layer is gradually faded, to switch the display of the menu screen in the lower layer to display of the group icon corresponding to the menu screen in the lower

layer.

31. (Deleted)

32. (Amended) A method according to claim 30, characterized in that the group icon in the upper layer has a second menu screen in a much upper layer, on which group icons are further arranged, and

in the switching step, the first menu screen in the upper layer, on which the group icons are arranged, is gradually switched to the second menu screen in the upper layer of a selected group icon, with a predetermined second transit screen inserted therebetween, in response to the operation information, the selected group icon is gradually minified on the transit screen, to zoom out from the group icon, and display of the first menu screen is gradually faded to switch display from the first menu screen to a corresponding second menu screen.

33. (Deleted)

34. An information providing method for switching a focus icon on a menu screen displaying a plurality of icons, in response to operation of a selection operation key, and for displaying an information screen of an icon focused in response to operation of a predetermined operation key, characterized by comprising:

a focus area generation step of generating a focus area at a predetermined area on the menu screen; and

a menu screen movement step of moving the menu screen on which the plurality of icons are arranged, such that a desired icon of the plurality of icons is moved to and

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focused at the focus area, in response to operation of the selection operation key.

35. A method according to claim 34, characterized by further comprising an enlarging display step of displaying the focused icon enlarged.

36. An information providing method for providing a desired information screen by making selection from icons respectively assigned to information screens, characterized in that

the icons are group icons assigned to groups each grouping a plurality of information screens, respectively, and

the information providing method comprises: an operation information input step of being inputted with operation information based on selection operation; a focus area generation step of generating a focus area at a predetermined area on a menu screen in an upper layer, on which the group icons are arranged; a menu screen movement step of moving the menu screen, on which the plurality of group icons are displayed, to the focus area such that a predetermined group icon among the plurality of group icons is moved to and focused at the focus area; and a switching step of switching display to a menu screen in a lower layer, which belongs to the group icon moved to the focus area.

37. A method according to claim 36, characterized by further comprising an enlarging display step of displaying the focused icon enlarged.

38. An information providing method for switching a focus icon in response to operation of a selection operation key and for displaying an information screen of

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a focused icon in response to operation of a predetermined operation key, characterized by comprising

an enlarging display step of displaying the focused icon enlarged, when the icon is focused.

39. An information providing method for providing a desired information screen by making selection from icons respectively assigned to information screens, the icons being group icons assigned to groups each grouping a plurality of information screens, respectively, characterized by comprising:

a focus switching step of switching a group icon indicating a focus, in response to operation of a selected operation key, on a menu screen in an upper layer on which the group icons are arranged;

an enlarging display step of displaying a focused icon enlarged; and

a layer switching step of switching display to a menu screen in a lower layer, on which the icons which belong to a group of the focused group icon, in response to operation of an operation key.

40. An information providing method for providing a desired information screen by making selection from icons respectively assigned to information screens, the icons being group icons respectively assigned to groups each grouping a plurality of information screens, characterized in that

the information providing method comprises an operation information input step of being inputted with operation information based on selection operation, and a

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switching step of switching a menu screen in an upper layer, on which the group icons are arranged, display to a menu screen in a lower layer, on which a predetermined number of icons that belong to a selected one of the group icons are arranged, with a predetermined transit screen inserted therebetween, in response to the operation information, and

in the switching step, an entire screen on which all icons that belong to the selected group icon are arranged is displayed on the transit screen, and thereafter, the menu screen in the lower layer is zoomed in.

41. An information providing method for providing a desired information screen by making selection from icons respectively assigned to information screens, the icons being group icons respectively assigned to groups each grouping a plurality of information screens, characterized in that

the information providing method comprises an operation information input step of being inputted with operation information based on selection operation, and a switching step of switching display between a menu screen on which a predetermined number of icons of information screens that belong to one same group are arranged, and the information screen, in response to the operation information, and

in the switching step, an entire screen on which all the icons that belong to a group of the information screen are arranged is displayed in response to operation information based on predetermined operation in a state where the information screen is displayed.

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42. An information providing method for providing selectively a desired information screen by individual icons respectively assigned to information screens, the icons being group icons respectively assigned to groups each grouping a plurality of information screens, characterized in that

the information providing method comprises: an operation information input step of being inputted with operation information based on selection operation; and a switching step of switching display between a menu screen in an upper layer, on which a predetermined number of group icons are arranged, and a menu screen in a lower layer, on which icons that belong to the group of a selected group icon, are arranged, in response to the operation information, and

in the switching step, an entire screen on which all group icons that belong to the group icon are arranged is displayed, in response to operation information based on predetermined operation in a state where the menu screen in the lower layer is displayed.

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